a
Gene Symbol: TCL1A
Description: T-cell leukemia/lymphoma 1A
Group: Multiple_Complex

TCL1A

TC1400010085.hg.1

P<0.001

Signal (Log2)

BPDCN   AML
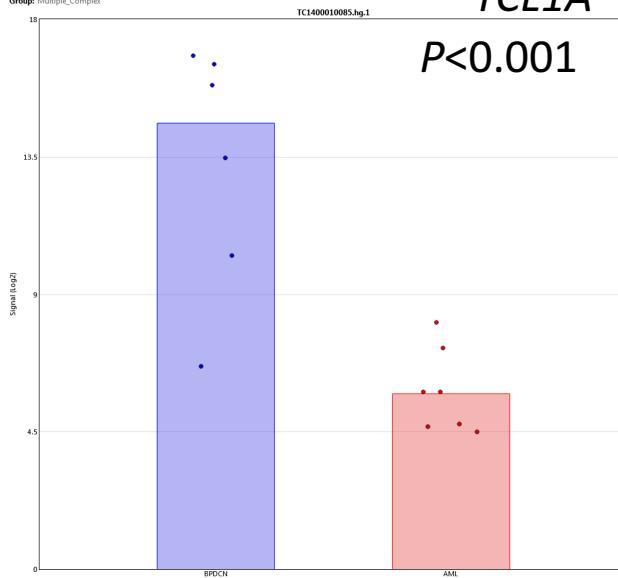
b
Gene Symbol: MPO
Description: myeloperoxidase
Group: Multiple_Complex

MPO

TC1700011249.hg.1

P=0.05

Signal (Log2)

BPDCN   AML
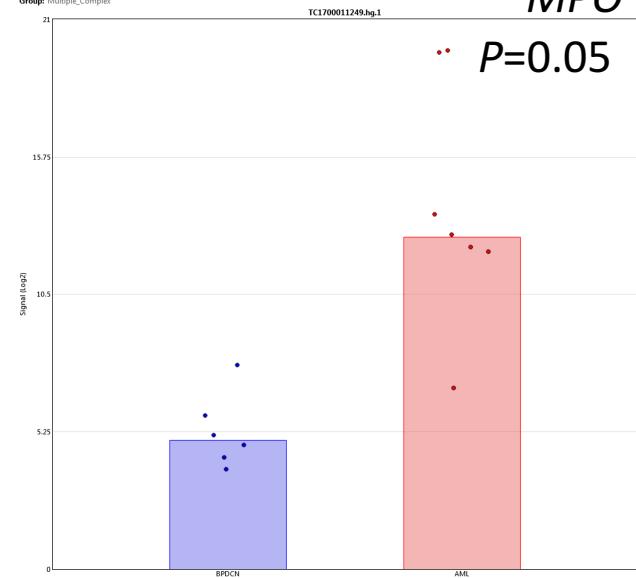
c
Gene Symbol: LAMP5
Description: lysosomal-associated membrane protein family, member 5
Group: Coding

LAMP5

TC2000006676.hg.1

P<0.01

Signal (Log2)

BPDCN   AML
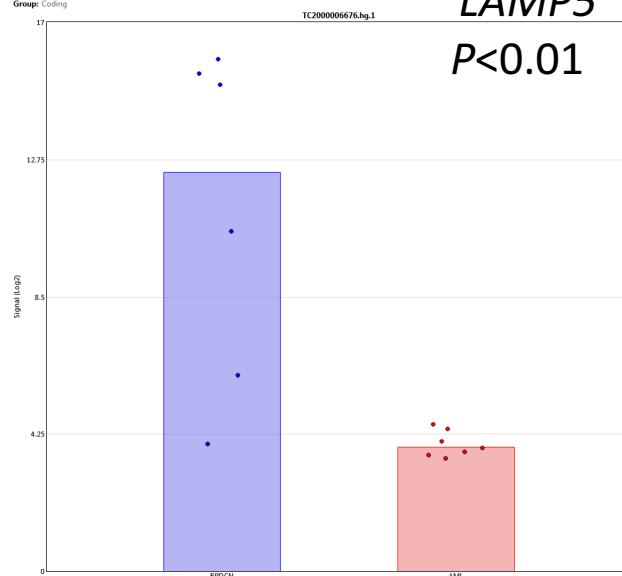
d
Gene Symbol: CCDC50
Description: coiled-coil domain containing 50
Group: Multiple_Complex

CCDC50

TC0300009866.hg.1

P<0.0005

Signal (Log2)
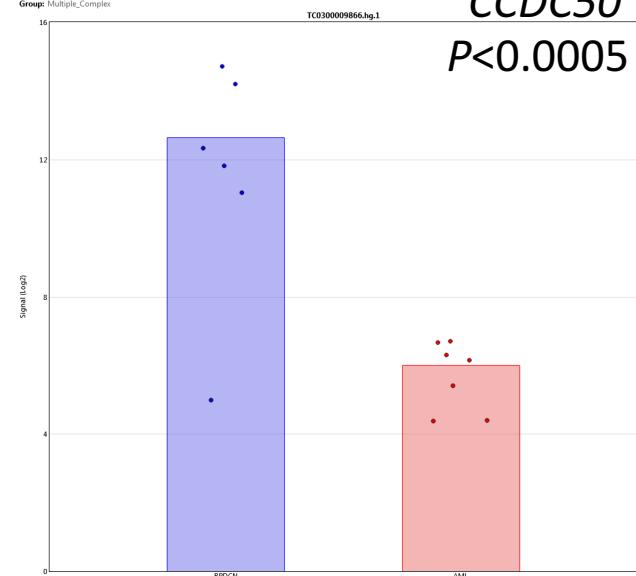
BPDCN   AML

e
Gene Symbol: PTPRS
Description: protein tyrosine phosphatase, receptor type, 5
Group: Multiple_Complex

PTPRS

TC1900009382.hg.1

*P*<0.0005

Signal (Log2)
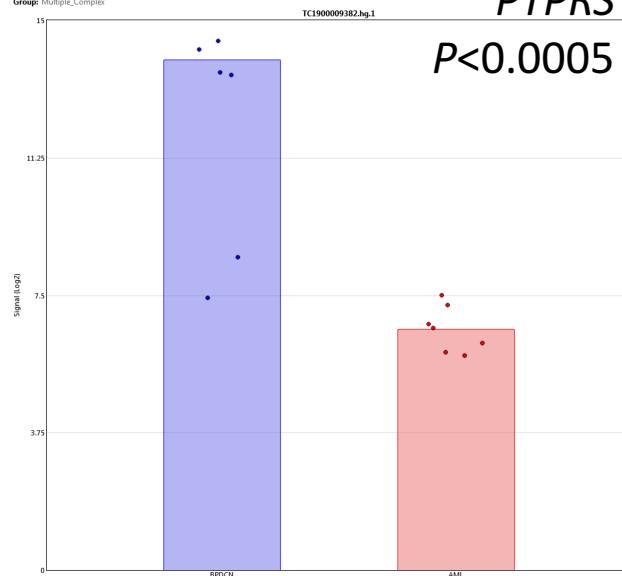
BPDCN   AML

Supplemental Figure 1. Differentially expressed genes between BPDCN and AML. (**a-b**) Known markers *TCL1A* and *MPO*. (**c-d**) Dendritic cell markers *LAMP5* and *CCDC50* (**e**) *PTPRS*

a *STAT3*
P<0.01

Gene Symbol: STAT3
Description: signal transducer and activator of transcription 3 (acute-phase response factor)
Group: Multiple_Complex

TC1700010721.hg.1
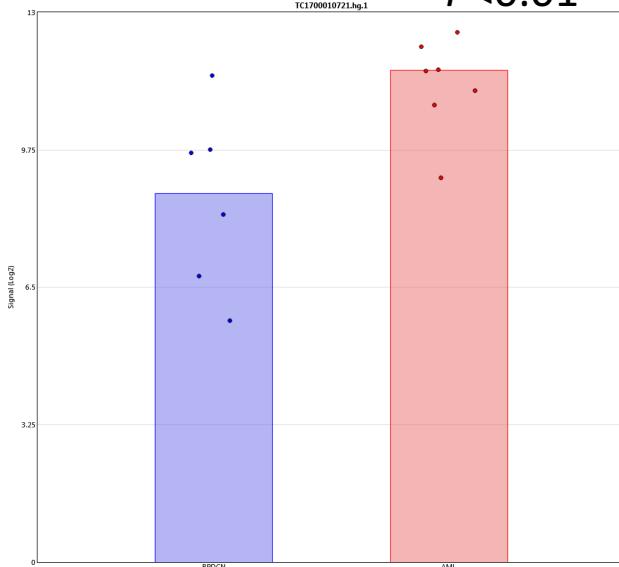
b *STAT5B*
P<0.01

Gene Symbol: STAT5B
Description: signal transducer and activator of transcription 5B
Group: Multiple_Complex

TC1700010717.hg.1
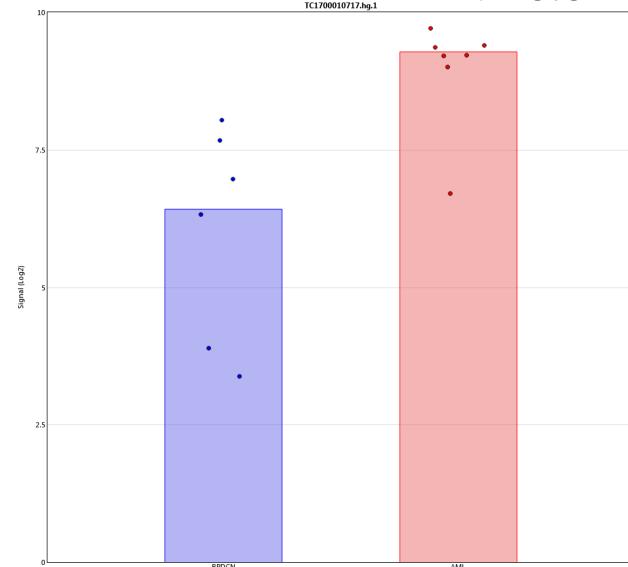
c *PTPN6*
P<0.01

Gene Symbol: PTPN6
Description: protein tyrosine phosphatase, non-receptor type 6
Group: Multiple_Complex

TC1200006657.hg.1
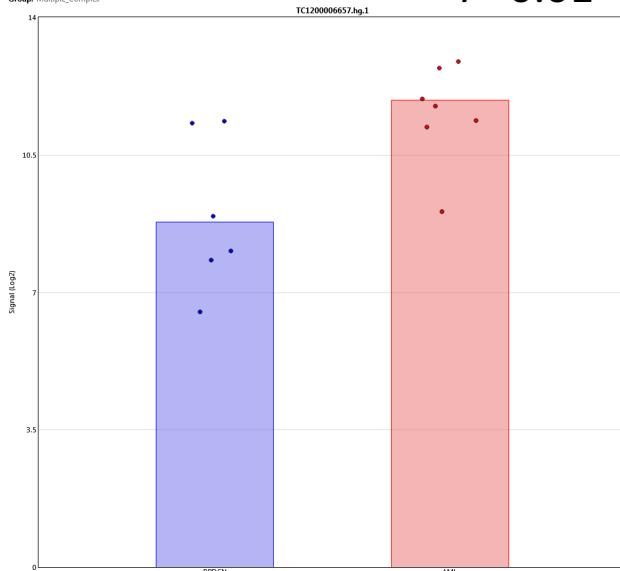
d *CSF3R*
P<0.05

Gene Symbol: CSF3R
Description: colony stimulating factor 3 receptor
Group: Multiple_Complex

TC0100013724.hg.1
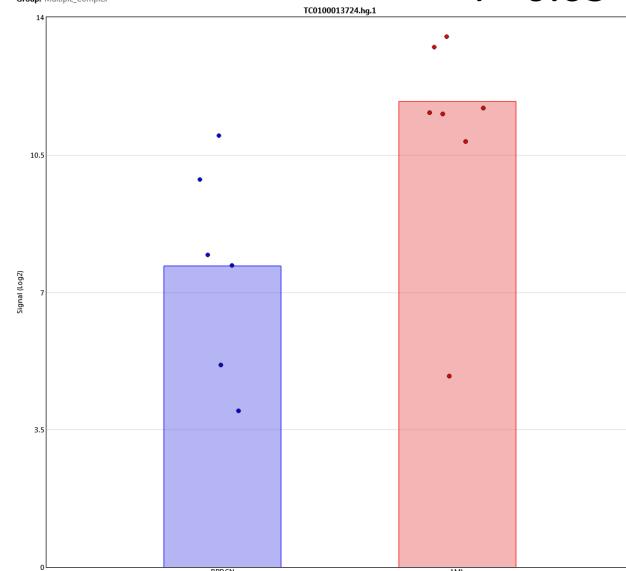
Supplemental Figure 2. Differentially expressed genes related to IL3 signaling expression (a) *STAT3* (b) *STAT5B* (c) *PTPN6* (d) *CSF3R*

a
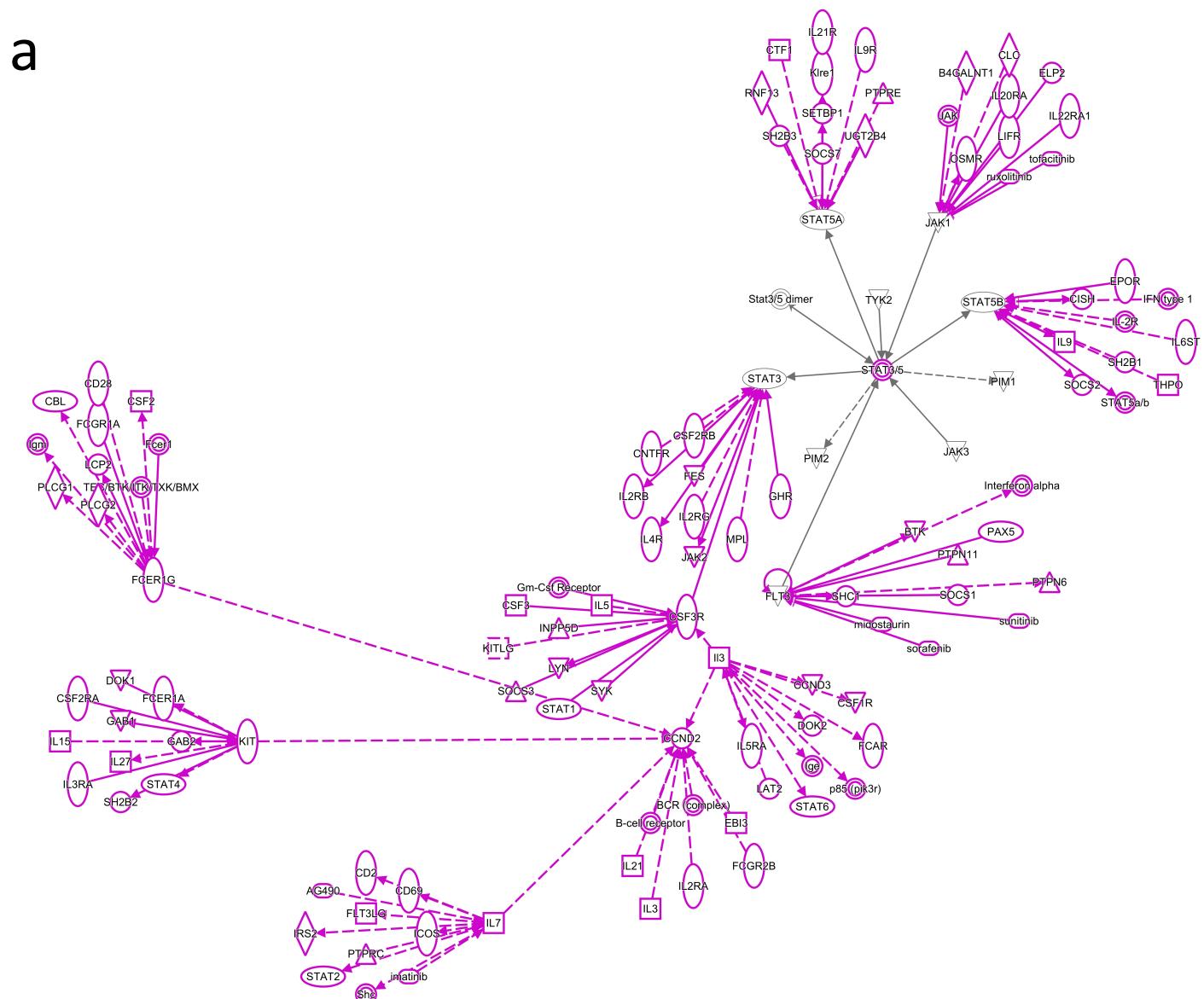
b

Consider only molecules and/or relationships where

(cell lines = K-562 OR NB4 OR HMC-1 OR J774 OR J-774A.1 OR SR OR THP-1 OR Lymphoma Cell Lines not otherwise specified OR Jurkat OR HL-60 OR Other Immune cell lines OR U266 OR Other Macrophage Cancer Cell Lines OR RBL-2H3 OR RPMI-8266 OR U937 OR Macrophage Cancer Cell Lines not otherwise specified OR Other Lymphoma Cell Lines OR Other Leukemia Cell Lines OR Leukemia Cell Lines not otherwise specified OR MOLT-4 OR HEL OR Myeloma Cell Lines not otherwise specified OR CCRF-CEM OR Other Myeloma Cell Lines OR BA/F3 OR WEHI-231 OR Immune cell lines not otherwise specified OR RAW 264.7) AND

(diseases = Cancer OR Inflammatory Disease OR Hematological Disease OR Immunological Disease OR Tumor Morphology)

Supplemental Figure 3. Ingenuity Pathway Analysis (IPA) of STAT3 signaling. The networks (a) were generated through the use of IPA (QIAGEN Inc., https://www.qiagenbioinformatics.com/products/ingenuity-pathway-analysis) using the filters shown (b)